

Claims

1. A door comprising a framework formed from lengths of pultruded synthetic
5 material having a low coefficient of thermal expansion, the space defined by the
framework being at least partially occupied by a core comprising a body of
synthetic, structural-density, foam material.

2. A door according to Claim 1, wherein skins are secured to the framework by, for
10 example, an adhesive, to leave edges thereof exposed, the foam material being
sandwiched between the skins.

3. A door according to Claim 1, wherein the foam is one of a polyurethane,
polyester, vinylester, epoxy or phenolic foam.

- 15 4. A door according to Claim 1, wherein the lengths of pultruded synthetic material
are hollow.

5. A door according to Claim 2, wherein at least one of the skins is formed from a
20 thermoset material.

6. A door according to Claim 1, wherein the framework is rectangular, having top
and bottom lengths and opposed side lengths, at least one of the side lengths
comprising a base to contact an edge of the body and two side arms to extend
25 from the base between the body and the skins, the outer face of the side arms
being shaped to receive and retain set adhesive by which the skin and side
length are held together.

7. A door according to Claim 6, wherein the side arms comprise spaced-apart ridges on their outer directed surfaces between which set adhesive is received and retained.

5

8. A door according to Claim 6, wherein the base comprises an extension portion having a recess to receive a weather seal.

10

9. A door according to Claim 6, wherein each of the four lengths of pultruded synthetic material which provide the framework comprise a base to contact an edge of the body and two side arms to extend from the base between the body and the skins, the outer face of the side arms preferably being shaped to receive and retain set adhesive by which the skin and each length are held together.

15

10. A door comprising a framework having skins secured to opposed faces thereof, the edges of the framework being exposed, the framework being formed from lengths of pultruded synthetic material having a low coefficient of thermal expansion.

20

11. A door according to Claim 10, wherein the space defined between the opposed skins and the framework is at least partially filled by a core comprising a body of synthetic, structural-density, foam material.

25

12. A door according to Claim 10, wherein the lengths of pultruded synthetic material are hollow.

13. A door according to Claim 10, wherein at least one of the skins is formed from a thermoset material.
14. A door according to Claim 11, wherein the foam is one of a polyurethane,
5 polyester, vinylester, epoxy or phenolic foam.
15. A door according to Claim 10, wherein the framework is rectangular, having top and bottom lengths and opposed side lengths, at least one of the side lengths comprising a base to contact an edge of the body and two side arms to extend
10 from the base between the body and the skins, the outer face of the side arms being shaped to receive and retain set adhesive by which the skin and side length are held together.
16. A door according to Claim 15, wherein the side arms comprise spaced-apart
15 ridges on their outer directed surfaces between which set adhesive is received and retained.
17. A door according to Claim 15, wherein the base comprises an extension portion having a recess to receive a weather seal.
20
18. A door according to Claim 15, wherein each of the four lengths of pultruded synthetic material which provide the framework comprise a base to contact an edge of the body and two side arms to extend from the base between the body and the skins, the outer face of the side arms preferably being shaped to receive
25 and retain set adhesive by which the skin and each length are held together.

19. A framework for a door comprising four lengths to be arranged in sides to form a generally rectangular frame, the lengths comprising pultruded thermoset resin containing elongate fibres.
- 5 20. A method of forming a door, the method comprising pultruding synthetic material having a low coefficient of thermal expansion to form lengths, assembling the lengths to form a framework, and attaching skins to opposed faces of the so-assembled framework.
- 10 21. A method of forming a door, the method comprising pultruding synthetic material having a low coefficient of thermal expansion to form lengths, assembling the lengths to form a framework, and at least partially filling the space defined by the framework with a core comprising a body of synthetic, structural-density, foam material.
- 15 22. A method of forming a door wholly composed of thermoset plastics, the method comprising forming a body of synthetic, structural-density foam material and connecting a length of pultruded synthetic material having a low coefficient of thermal expansion to one edge of the body, the length comprising two side walls
- 20 extending from a base, an outer face of each side wall having spaced apart projections, attaching lengths of pultruded synthetic material having a low coefficient of thermal expansion to the other edges of the body to provide a peripheral framework, applying an adhesive to the side walls and then applying a skin to cover the frame and body and curing the adhesive to unite the skin to
- 25 the framework.